CHEMICAL METERING SYSTEMS

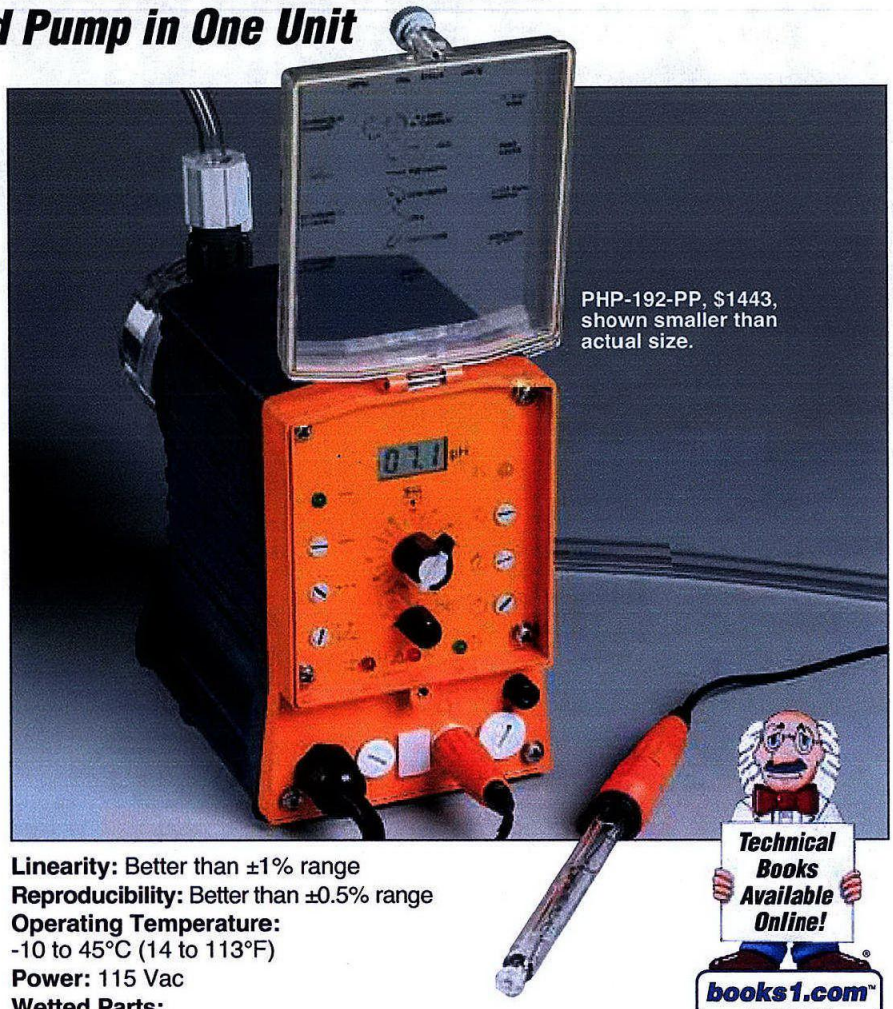
Combine Controller and Pump in One Unit

PHP-192

$1443 1 YEAR WARRANTY

- **Combines Controller and Pump in One Unit**
- **Proportional Control**
- **LCD Readout of Process pH or Setpoint**
- **Reverse Direction Control**
- **Control Bandwidth Manually Adjustable, 1 to 3 pH Units**
- **NEMA 4X (IP65) Enclosure**
- **Choice of PP, PTFE or 316 SS Liquid Ends**

The PHP-190 Series of chemical metering systems are unique instruments that combine a pulse frequency controller with a diaphragm-type pump in one compact unit. In the control mode, deviations from setpoint are converted to pulses which vary the stroke rate of the metering pump. As the setpoint is approached, the pump feed slows down to minimize chemical loss and overshoot of the endpoint. Variation of the stroke rate is controlled by a front panel potentiometer or through process controlled operation by external electric or mechanical pacing or by closed loop control. The units are supplied with foot valve, injection valve, power cord, and a float level switch made of polypropylene with a 1.8 m (6') polyethylene-coated cable. Polypropylene (**-PP**) models include a 3 and 1.5 m (10 and 5') length of polyethylene tubing. For proper control, a holding tank with a minimum 10-minute residence time is required.



PHP-192-PP, $1443, shown smaller than actual size.

SPECIFICATIONS

Range: pH control 0 to 14 pH
Electrode Connector: BNC (includes SN6-to-BNC adaptor)
Input Impedance: >1012 ohms
Zero Point Adjustment: ±3 pH
Slope Adjustment: 85 to 102%
Setpoint Adjustment: 0 to 100%
Display: 3-digit LCD
Control Bandwidth: 1 to 3 pH units, adjustable
Control Direction: Reversible
Linearity: Better than ±1% range
Reproducibility: Better than ±0.5% range
Operating Temperature: -10 to 45°C (14 to 113°F)
Power: 115 Vac
Wetted Parts:
-PP: Polypropylene and EPDM
-T: PTFE
-S: 316SS and PTFE
All versions have ceramic valve balls
Connections:
-S: ¼" FNPT; PHP-192 thru 194-PP
-T: ¼ x 3/16" tubing; PHP-195 & 196-PP
-T: ½ x ⅜" tubing

Ship Wt. kg (lb):
PHP-192 thru 194: -S: 0.7 (1.6); -PP and -T: 0.3 (0.7)
PHP-195 and 196: -S: 1.5 (3.3); -PP: 0.3 (0.7); -T: 0.5 (1.1)

MOST POPULAR MODELS HIGHLIGHTED!

To Order *(Specify Model Number)*

Model No.	Ratings at max. back pressure		Price		
	psi (bar)	USGPH (l/h)	PP	PTFE	316SS
PHP-192-(*)	232 (16)	0.20 (0.75)	$1443	$1970	$2240
PHP-193-(*)	174 (12)	0.34 (1.29)	1450	1972	2247
PHP-194-(*)	101 (7)	0.75 (2.82)	1450	1992	2360
PHP-195-(*)	43.5 (3)	1.71 (6.48)	1454	2076	2565
PHP-196-(*)	22 (1.5)	3.25 (12.3)	1470	2284	2607

** To order, specify **"-PP"** for polypropylene, **"-T"** for Teflon®, or **"-S"** for 316 stainless steel.*
***Ordering Examples: PHP-192-S**, PHP-192 pump with 316 stainless steel liquid end, **$2240**.*
***PHP-193-PP**, PHP-193 pump with polypropylene liquid end, **$1450**.*

Accessory

To Order *(Specify Model Number)*

Model No.	Price	Description
CM-0902	$495	Reference Book: Corrosion Resistant Tables

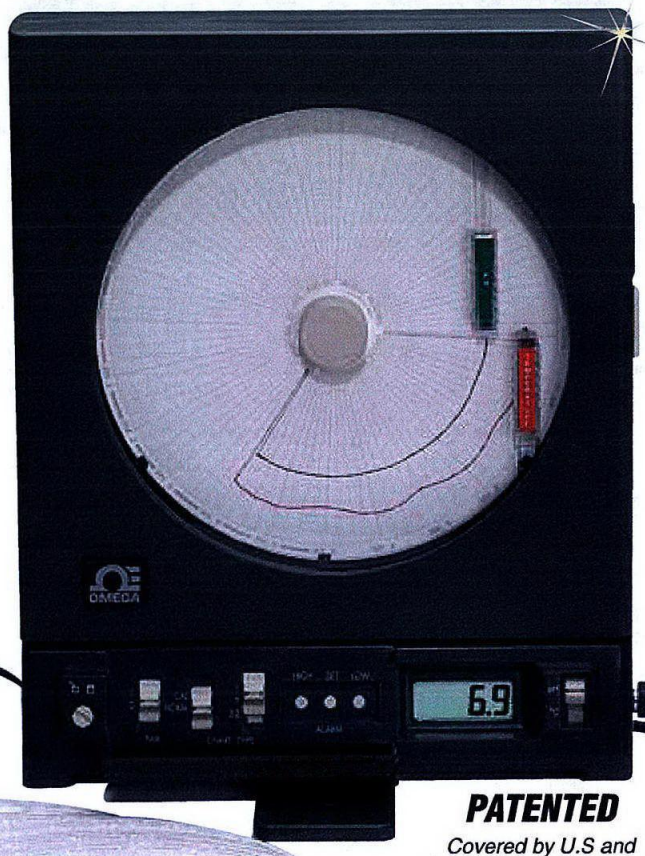
INDUSTRIAL pH INSTRUMENTATION & ELECTRONICS

Microprocessor-Based pH and Temperature Recorders With Large 200 mm (8") Diameter Charts

CTPH
$970

MADE IN USA | OMEGACARE Extended Warranty Program | 1 YEAR WARRANTY | CE

Electronics Only | 220 V Model Only



- **pH Range 0.2 to 12.0 Temperature 2 to 80°C**
- **In Line or Submersible pH Sensor with PPS (Ryton) Body and ¾" NPT**
- **120 Double-Sided Circular Charts: 1-, 7-, 32-Day Records**
- **Alarm Contact Standard**
- **Benchtop or Wall Mounted**
- **Battery or Wall Socket Powered**
- **LCD Backlight & Chart Light with AC Power**

The CTPH is a cost-effective recorder for pH and temperature, ideal for facilities required to maintain a record of pH. pH range is 0.2 to 12.0 with Automatic Temperature Compensation, using a unique, electronically amplified probe that provides pH and temperature input to the recorder unit through a 6-pin Mini DIN connector.

Sensor included, order CTPH-PROBE, $25 for replacement.

PATENTED

Covered by U.S and International patents and pending applications

AVAILABLE FOR FAST DELIVERY!

Specifications

pH input (green pen)
pH Range: 0.2 to 12.0 pH
Resolution: 0.1 pH on LCD and 0.2 pH on chart
Accuracy: ± 0.2 pH
ATC Range: 0 to 80°C
Sensor: In line or submersion PPS (Ryton) body with ¾" MNPT, sealed double junction Teflon®, and a preamplified output to insure accurate signal over long distances
Cable Length: 1.8 m (6')
Temperature INPUT (red pen)
Temperature Range: 0 to 100°C (32 to 212°F)
Resolution: 1°C on LCD and 2°C on chart
Accuracy: ±2°C
Sensor: Combination pH & temperature
Display: User switchable pH and temperature
Audible Alarm: Integral beeper
Chart: 200 mm (8") circular linear radial div. 1-, 7-, 32-day, with pH and °C scale
Dimensions: 33.5 H x 27.1 W x 6.7 cm D (13 3/16 x 10 11/16 x 2 5/8")
Weight: Approx. 3.2 kg (7 lb) including batteries

To Order *(Specify Model Number)*

Model No.	Price	Description
CTPH-110V-G-AL	$970	Recorder, 110 Vac
CTPH-220V-G-AL	970	Recorder, 220 Vac
CT585-PS	10	Red (temp) and green (pH) pen set
CT585-PS-6	52	Package of six (6) pen sets
CTPH-C(*)C	19	100 double-sided charts
CTPH-BNC	99	BNC pH adaptor
CTPH-PROBE	225	Replacement pH probe

Comes in a charcoal gray color, with detachable solid state pH/temperature sensor, additional 1.8 m (6') extension cable, 120 double-sided charts (40 each of 1-day, 7-day and 32-day, all °C), two sets of pens, wall mount template and hardware, 110 or 220 Vac adaptor, chart lights, 4 "D" alkaline batteries and complete operator's manual.

Insert **"D" for 1 day, **"W"** for 7 days, **"M"** for 32 days of recording (all charts are °C). For white color case, replace **"-G"** with **"-W"**, No additional charge.*

Note:** Using the BNC adaptor, the ATC is disabled and any low cost pH sensor can be employed, like **PHE-4202, $65.

***Ordering Example: CTPH-110V-G-AL** recorder, and **CTPH-CDC**, pack of 100 double sided 1 day charts, **$970 + 19 = $989.OCW-3** OMEGACARE℠ extends standard 1-year warranty to a total of 4 years ($242), $970 + 242 = **$1212.** OMEGACARE℠ extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE℠ covers parts, labor and equivalent loaners.*

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- **Flow and Level**

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

- **pH and Conductivity**

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

- **Data Acquisition**

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

- **Pressure, Strain and Force**

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

- **Heaters**

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters

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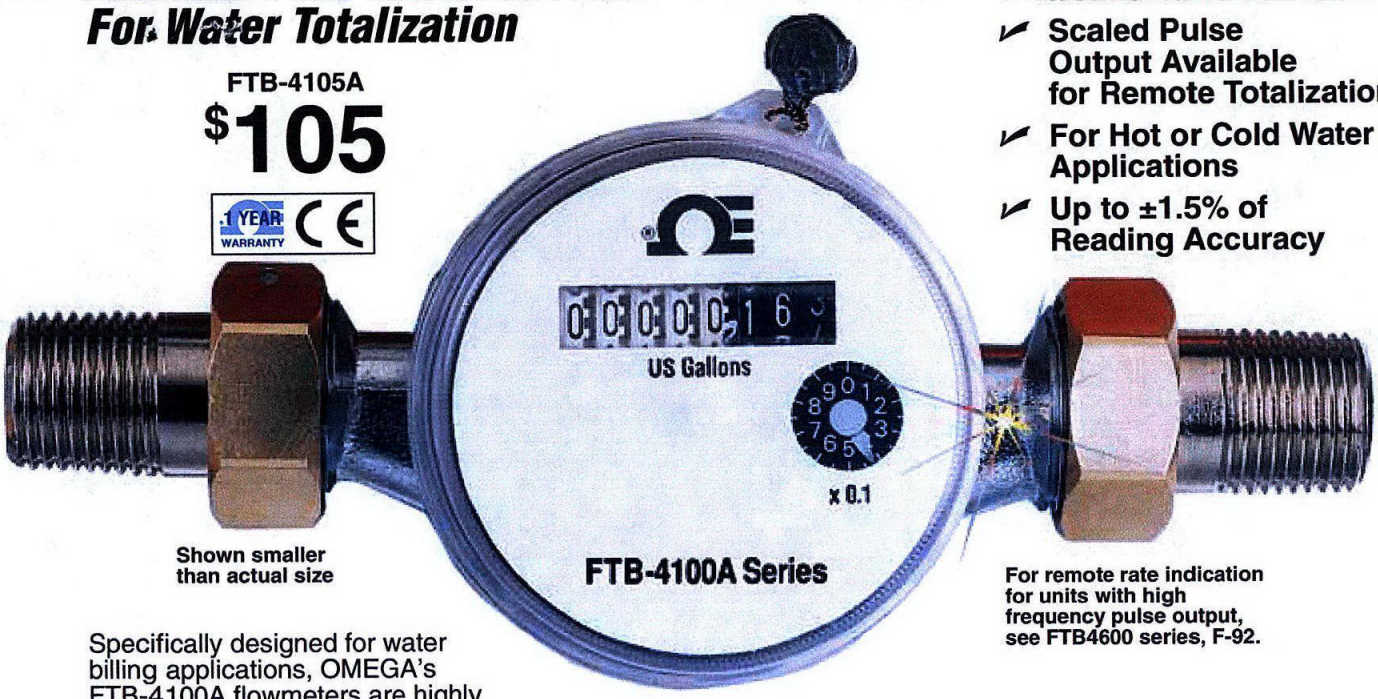
EPG05

TURBINE METERS
For Water Totalization

FTB-4105A
$105

- For Water Flows from 0.13 to 132 GPM
- Scaled Pulse Output Available for Remote Totalization
- For Hot or Cold Water Applications
- Up to ±1.5% of Reading Accuracy



Shown smaller than actual size

For remote rate indication for units with high frequency pulse output, see FTB4600 series, F-92.

Specifically designed for water billing applications, OMEGA's FTB-4100A flowmeters are highly accurate and feature tamper-resistant, non-resettable totalizers. The large faces are easy to read.

Optional reed relay scaled pulse outputs allow for remote totalization [1.8 m (6') of cable included]. The pulse output option is factory installed and must be requested at the time of order.

All FTB flowmeters feature built-in strainers, trickle flow indication and are shipped complete with locking nuts and coupling pieces.

FTB-4100A Series

Accuracy: from 10% of cont. to max. flow : ±1.5% of reading; below 10% of cont. flow: ±2% of reading
Power for Pulse Output: 6 to 16 Vdc
Max. Temp: 93°C (200°F)
Max. Pressure: 150 psi
Pulse Outputs:
Reed Relay: FTB-4100A-P Series: 1 gal/pulse (for remote totalization only)
Max. Reading (gals): 10 million for ½" and ¾"; 100 million for 1", 1¼", 1½"

Wetted Parts: Brass body, stainless steel polyimide (fiberglass), polypropylene, EPDM O-Ring
Installation Requirements: 10 pipe diameters upstream, 5 downstream
Mounting: Horizontal mounting required for 1", 1¼", and 1½" models. Vertical mounting for ½" and ¾" sizes only
Compatible Meter: DPF701, see Page F-80 for details.

MOST POPULAR MODELS HIGHLIGHTED!

To Order *(Specify Model Number)*

Model No.	Price	Flowrate (GPM) Min.	Cont.	Max.	Conn MNPT	Body Length mm (in)	NPT Length mm (in)	Height mm (in)	Width mm (in)	Press Drop*	Weight kg (lb)	Max. Temp °C (°F)
FTB-4105A	**$105**	0.13	6.6	13	½"	110 (4.33)	60 (2.36)	70 (2.75)	70 (2.75)	3.6	0.5 (1.1)	93 (200)
FTB-4105A-P	**170**	0.13	6.6	13	½"	110 (4.33)	60 (2.36)	70 (2.75)	70 (2.75)	3.6	0.5 (1.1)	93 (200)
FTB-4107A	**109**	0.22	11	20	¾"	130 (5.12)	63 (2.48)	77 (3.03)	70 (2.75)	3.6	0.6 (1.4)	93 (200)
FTB-4107A-P	**189**	0.22	11	20	¾"	130 (5.12)	63 (2.48)	77 (3.03)	70 (2.75)	3.6	0.6 (1.4)	93 (200)
FTB-4110A	**204**	0.5	26.4	50.0	1"	260 (10.24)	67 (2.64)	140 (5.51)	92 (3.62)	3.6	2.5 (5.5)	93 (200)
FTB-4110A-P	**257**	0.5	26.4	50.0	1"	260 (10.24)	67 (2.64)	140 (5.51)	92 (3.62)	3.6	2.5 (5.5)	93 (200)
FTB-4112A	**230**	0.5	26.4	50.0	1¼"	260 (10.24)	73 (2.87)	140 (5.51)	92 (3.62)	3.6	2.5 (5.5)	93 (200)
FTB-4112A-P	**305**	0.5	26.4	50.0	1¼"	260 (10.24)	73 (2.87)	140 (5.51)	92 (3.62)	3.6	2.5 (5.5)	93 (200)
FTB-4115A	**425**	0.8	44.0	90.0	1½"	300 (11.81)	73 (2.87)	140 (5.51)	120 (4.72)	3.6	5.4 (12.0)	93 (200)
FTB-4115A-P	**501**	0.8	44.0	90.0	1½"	300 (11.81)	73 (2.87)	140 (5.51)	120 (4.72)	3.6	5.4 (12.0)	93 (200)
FTB-4120A	**766**	1.3	66.0	132.0	2"	270 (10.63)	flange	226 (8.90)	155 (6.10)	2.9	12.4 (27.0)	90 (194)
FTB-4120A-P	**839**	1.3	66.0	132.0	2"	270 (10.63)	flange	226 (8.90)	155 (6.10)	2.9	12.4 (27.0)	90 (194)

*Models with suffix "**P**" are for reed relay pulse output, for remote totalization only. ½" to 1½" have NPT connections, the 2" meters have flanged connections.*

** Pressure loss is at continuous flow rate. ** Consult Flow Engineering Department.*

Comes with complete operator's manual.

Ordering Examples: FTB-4105A-P**, pulse output meter with min. flowrate of 0.13 GPM and max. flowrate of 13.0 GPM; max. water temperature 90°C (200°F), **$170. FTB-4115A**, pulse output meter with min. flowrate of 0.8 GPM and max. flowrate of 90.0 GPM; max. water temperature 93°C (200°F), **$425.

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EPG05

Control Instruments Corp.
25 Law Drive, Fairfield, NJ 07004-3295 USA
Telephone 973-575-9114 Fax 973-575-0013
E-mail: bnutting@controlinstruments.com

Proposal # EA60331RSN

Number of pages included: 3

Environmental Alternatives
Mr. Marty Borruso
126 Passaic Street
Newark, NJ 07104

Phone #: 917.273.5822
Fax #: 718.504.7771
E-mail: utilitymet@aol.com

Date	March 31st, 2006
Firm for	60 Days from original date of proposal
FOB Point	Fairfield, New Jersey
Freight Terms	FCA Fairfield, NJ (INCOTERMS)
Payment Terms	30 days after shipment if approved
Shipment Promise	4-6 wks ARO (after receipt of order)

Submitted by *Robert S. Nutting*
Robert S. Nutting

Reference: Effluent waste stream - % LFL monitoring for solvent vapors in air below 100°F

Dear Mr. Borruso,
I am pleased to provide the following info in response to your request regarding PVSC monitoring requirements. Should you have any questions or need additional information, please don't hesitate to give me a call.
Sincerely yours

Item	Qty	Description		Unit Price	Extended price
01	1	SNR671	***PrevEx*** ™, Flammability Analyzer heated to 60°C. ***Wall mount*** analyzer assembly with integrated control monitor. Nema 12 and FM approved for use in Class I, Division II areas. Includes zero and span cal solenoids, side access sample & exh six on board relays (warning, danger, fault, horn, cal in process, & service needed), two user configurable control input contacts, an RS-485 serial port (Modbus) & a calibrated 4-20 mA output. Factory calibrated, 0-100 % LFL solvent vapors in air @ 200°C ***Suitable for monitoring 1D1 samples with dew pts below 50°C***	$9,167.00	$9,167.00
02	1	FLT070	Compress air filter assembly, particulate/coalescing	$329.00	$329.00
03	1	PRV022	Calibration hardware for zero/span test gas cylinders	$175.00	$175.00
04	1	CYL018	Calibration test gas cylinder, 1.15% ethylene in air	$149.00	$149.00
05	1	Service	Startup assistance & training (4 hrs onsite + travel)	$870.00	$870.00
06	1	INS001	Installation/Operation Manual, with CD ROM copy	$50.00	N/C
				System total	**$10,690.00**

Application notes and proposal comments:

a. *All equipment is factory assembled and calibrated for its specific application prior to shipment. To be sure, we understand the requirements of this application please complete and return survey with any additional information you can offer about this process and your safety control needs.*
b. *This equipment requires a continuous supply of clean dry compressed air, **propane fuel** and 120 AC power. For more information, please refer to installation dwgs & product specs for SNR671.*

Terms and Conditions

1. Orders are subject to acceptance only at seller's plant.
2. The method of shipment indicated has been found to be most satisfactory for shipment of that material. Shipment by other carriers will be made if specifically requested, but it is not recommended. All shipments will be made by delivery to carrier at shipping points.
3. Title will pass to buyer on delivery to carrier at shipping point. Risk of damage shall be on the buyer and seller shall in no way be responsible for the safe arrival of the shipment. Title shall so pass to buyer regardless of any provisions for payment of freight and insurance by seller and regardless of the form of shipping documents.
4. Control Instruments Corporation shall not be liable for any default or delay in performance under this warranty caused by any contingency beyond our control, including war, government restrictions or restraint, strikes, floods, or a short or reduced supply of parts or raw material.
5. Terms of payment are subject to the approval of the seller. Unless credit is granted price is payable upon delivery to carrier.
6. Seller does not report, pay or collect any use tax, sales tax, or similar tax which may be imposed upon the buyer under the laws of the state to which the shipment is to be made unless seller shall separately state such charges to buyer on acceptance of such order and the invoice for such merchandise. Buyer shall report and pay any use tax or similar taxes which may be imposed upon buyer by reason of such order and shall hold the seller harmless therefrom.
7. Stenographical and clerical errors on the face of this form are subject to correction.
8. No order accepted by the seller may be canceled by the buyer except by mutual agreement of the buyer and seller.
9. If the items covered by the order are being purchased for ultimate delivery to the U.S. government pursuant to a government contract, or for use on a U.S. government contract with or without other equipment, then all or any part of this order may be canceled only in accordance with the cancellation provisions of the corresponding U.S. government contract.

Warranty Information

If within one year from the date of shipment, the equipment purchased from Control Instruments Corporation, or any part of that equipment, fails because of a manufacturing defect, Control Instruments will supply a replacement part F.O.B. Fairfield, New Jersey. The furnishing of a replacement part under the terms of this warranty will apply to the original warranty period, and will not serve to extend the warranty period beyond the original one year. This warranty does not cover the cost of labor involved in diagnostic calls, or in servicing or replacing parts. This warranty does not apply to consumable parts or batteries.

This warranty shall not apply if the equipment has been subjected to misuse, negligence, accident in transit or has been tampered or altered in any way, improperly installed, or if the equipment components have been subjected to forces or stresses beyond those recommended and specified by the manufacturer.

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H7DOC006 Rev 0

Control Instruments Corporation

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Phone 973.575.9114 Fax: 973.575.0013
Website: www.controlinstruments.com
Email: bnutting@controlinstruments.com

APPLICATION SURVEY

Name _____ *Phone* _____
Company _____ *Fax* _____
Address _____ *Email* _____
_____
_____

Keywords

Process
Area Monitor
Leak Detector
PPM
LEL
LFL
%Vol
Oxygen
PPM Cv
Total Carbon
Combustibles
Toxic
Semiconductor
Power
Automotive
Storage
Liquid
Gaseous
Cryogenic
Solvents
Gases
Fuel Oil
Fuel gases
LNG
LPG
Pollution
CEMS
Control
Printing
Coating
Laminating
Painting
Oven
Dryer
Kiln
Rotogravure
Flexographic
Gravure
Coil coating
Waste gas
Sewage
Oxidizer
RTO
Waste gas
Boiler
Pulp

Please describe your application/ process, and the industry/products involved, or use keywords.

***Number of points to be monitored?*_____**

Please describe the sensor type/ technology of interest, if known:

Vapors/solvents present in sample stream	Concentration			Unit of measure
	Minimum	Normal	Maximum	

Indicate if any of the following may be present

☐ Condensate ☐ Silicones ☐ Plasticizers ☐ Resins
☐ Particulate ☐ Halogens ☐ Catalytic poisons ☐ Lead/organo-metallic

For measurement of a process, describe conditions at sample point:

	Minimum	Normal	Maximum	Unit of measure
Temperature				☐ °F ☐ °C
Pressure				
Flow rate				
Oxygen				
Water vapor				

Requirements for the sensor/transmitter assembly in the vicinity of the sample point:

Electric Power	☐ 115 VAC	☐ 230 VAC	☐ _____	☐ 24 VDC
Location	☐ Indoor	☐ Outdoor	☐ Corrosion resistant	
Enclosure ratings	☐ IP ___	☐ NEMA ___	☐ Purged/pressurized	
Approvals required	☐ CSA	☐ CENELEC	☐ ATEX	☐ FM
Hazardous areas	☐ Class 1 Div __	☐ Zone ___	☐ T___ temperature rating	

Requirements for the monitoring device, remote from the sensor/sample point, if any:

☐ 115 VAC ☐ 230 VAC ☐ _____ ☐ Indoor ☐ Outdoor
☐ Panel mount ☐ Rack mount ☐ Wall mount ☐ IP ___ ☐ NEMA ___

PrevEx

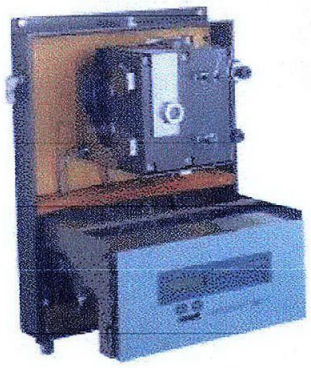
Flammability Analyser

Control Instruments
Corporation

PrevEx

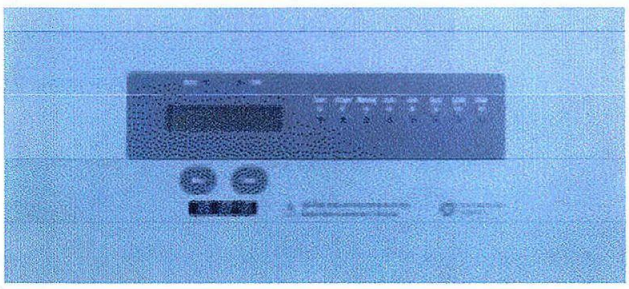
The PrevEx, formerly the 670 series of analyzers, is Control Instruments' Flammability Analyzer for Lower Flammable Limit monitoring. Its new name boasts its ability to prevent explosions and its new look adds flavor to the industrial environment. To top it off, it still solves all of the sampling, measuring, and reporting problems found in industrial process applications while promising accuracy, consistency, and reliability. The PrevEx allows you to protect your investment: it keeps your facility, employees, and environment safe while increasing your productivity and eliminating downtime. Its accuracy surpasses that of any other analyzer, due to its unique flame temperature technology, delivering the highest degree of safety. This exclusive design is based on a sensing-flame concept that has since proven itself to be the most reliable detection system in the industry. Unlike catalytic sensors that can become contaminated, give false readings or fail outright, the PrevEx has many impressive features to ensure unmatched safety, extreme accuracy, and ultra-fast response time, even when sampling a mixture of several different flammable vapors. The PrevEx Flammability Analyzer is efficient and economical, leaving you feeling confident in its performance. After all, a monitoring system is only as good as the sensor it employs! Read on to find out more of the PrevEx's exclusive features and see how it truly prevents fires and explosions.

Prevent Exp



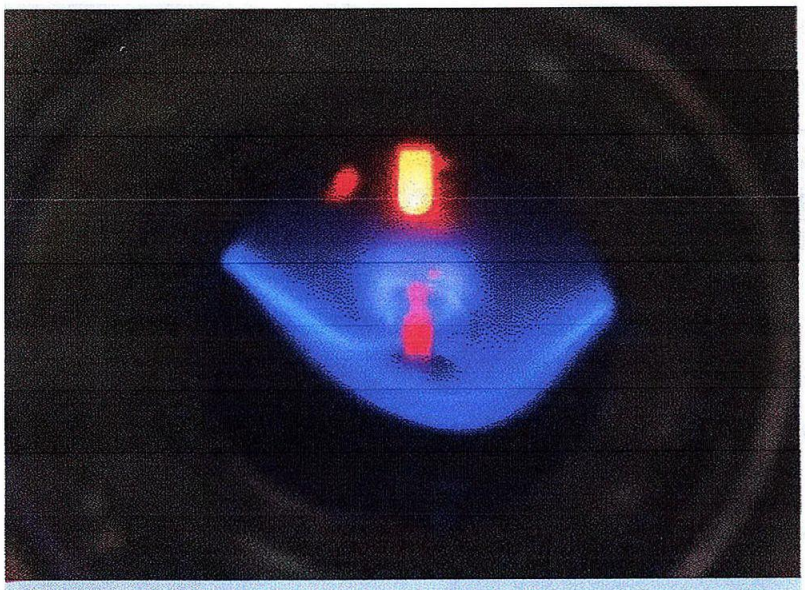
PrevEx Delivers Unmatched Safety

The PrevEx Flammability Analyzer incorporates several fail-safe features designed to ensure perfect safety under all conditions. In fact, the inherent design of the sensing flame technology is that the flame must always be on and the system working properly or an alarm is given. This leaves no problem undetected. Whether it is a loss of fuel, air, sample flow or power, a malfunction relay is automatically tripped and the operator is notified immediately of a status change. By contrast, catalytic sensors and other "indirect" measuring systems can become corroded, obstructed or poisoned, yet still register as normal. The alarm relays include warning, danger, fault, horn, service needed, and system under calibration. These built-in relays guarantee complete safety and reliability, allowing for only true indications on the meter. From a safety viewpoint, the sensing flame technology has no equal. The PrevEx also exhibits a very stable zero with a calibration accuracy of less than 5% error per year. In recognition to the PrevEx's inclusive fail-safe features, our flammability analyzer has received the following approvals:



No Condensation Yields True Sample

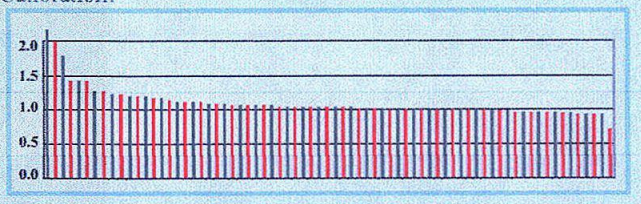
The essence of the PrevEx detection system lies in its ability to perform accurately under the demands of the industrial environment. Industrial processes contain compounds that condense and contaminate a sensor. With condensation comes clogging, fouling, and poisoning, which restricts the sample flow to the analyzer, removing important elements from the sample stream. This results in an inaccurate reading. To combat this problem and assure a true sample, the PrevEx has a corrosion resistant, heated sample train through which the sample is delivered. The heat eliminates that condensation and withstands corrosive elements, leaving you with an accurate representation of your process. To be doubly sure that you are receiving an accurate reading free of contamination, the PrevEx Flammability Analyzer collects the sample using an aspirator, driven by compressed air. There is no pump or blower; instead microprocessor control guarantees constant sample flow and pressure through the train, assuring you of the highest level of accuracy. To top it off, even the sensor itself is free of poisoning from various organo-metallics, halogenated hydrocarbons, silicones, or plasticizers. This reliable performance leaves your plant safe and secure, avoiding unnecessary downtime and frequent maintenance.



losions

Universal Calibration

The PrevEx gives consistent and reliable readings even when faced with multiple or changing solvent concentrations. In fact, the PrevEx Flammability Analyzer has the ability to read multiple solvent formulations more accurately than any other sensor in the entire industry, resulting in the least amount of detection error from solvent to solvent. This is due to the powerful universal calibration feature, made possible through the PrevEx's sensing flame technology. This technology provides the ability to accurately measure solvent concentrations for an array of solvents, even though the meter was calibrated on only one specific solvent. That's right with the PrevEx there is no need for recalibration, giving you excellent cross-calibration accuracy and ultimately eliminating incorrect readings. So, there is no need to shut down your system or buy multiple sensors to monitor various solvents simultaneously, with the PrevEx just one calibration offers protection with accuracy for your present and future needs. In the graph below, each bar illustrates the response factor for a particular solvent. For most combustible gases it ranges from 0.8 to 1.2 and for solvents from 0.9 to 1.1. The uniformity of the bars indicates Universal Calibration.

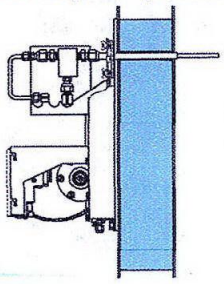


Sensing Flame Technology

The PrevEx Flammability Analyzer contains a carefully metered pilot, or sensing flame. It is a direct measure of the total flammability of the sample, not to be confused with the industry's FID. This flame burns continuously inside a small chamber of the sensor housing. Flammable vapors are drawn from the sample point into the chamber, where they are incinerated by the flame. A temperature detector measures the resulting change in flame temperature and transmits the information for display in % LFL format. Should a problem of any kind arise the flame temperature must change and the control monitor always lets you know immediately.

Direct Mount Provides Fastest Response Time

When it comes to giving you early warning no other design even comes close to the PrevEx's less than 1-second response time. This impressive response, which is eight times faster than the industry's average sensor, is due to the PrevEx's direct mount design. By mounting the sensor directly on the process duct without heat trace sample lines, pumps, or blowers, you eliminate the unpredictability of moving parts and shorten the sample path significantly. This radically reduces sample delivery time, while ultimately accelerating response time. The PrevEx Flammability Analyzers are readily accessible. They easily attach to a wide variety of process walls and duct types and are unaffected by high process temperatures, making installation and operation uncomplicated. Field pneumatic and electrical connections are easily made at the bottom of the analyzer. If necessary, an optional wall-mount design is available.

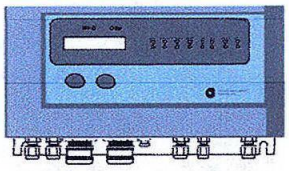


PrevEx mounted directly on process duct

Efficient Operation Reduces Maintenance

The PrevEx Flammability Analyzer's all inclusive design is easily operated and maintained. The front panel includes a complete set of status indicators and an eight-character alpha-numeric LCD display. Using just two pushbuttons, you can access all calibration, programming and diagnostic routines. And for complete access, contacts are also provided for two external control inputs. A window in the outer cover lets you see the entire front panel. This is where calibration adjustments can be initiated. Since the PrevEx comes equipped with solenoid valves for both zero and span test gas, an integral microprocessor automatically makes all calibration adjustments for you. The window also permits non-intrusive local access; you simply shine a flashlight at photo-transistors to activate a command menu. To make operation even more efficient the PrevEx can be accessed remotely. You simply connect directly to your PLC or a display meter in the operator panel through the built-in 4-20mA analog output. If you need true, two-way digital communication with remote control, the PrevEx provides a Modbus RS-485 serial port and optional operator interface panels. This extremely efficient process greatly reduces maintenance time. Of course, all parts are readily available and quickly replaced when needed, so when you want to inspect or service a unit the job is fast and easy.

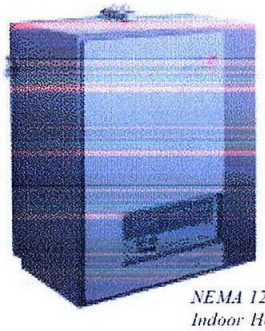
Field pneumatic and electrical connections made at bottom of PrevEx



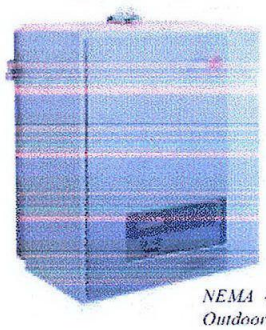
Prev Ex

PrevEx Tailored
To Your Requirements

The PrevEx Flammability analyzer consists of several models designed to fit your specific monitoring needs. All models monitor a number of common vapors and are unaffected by processes as diverse as flexographic printing and ceramic kilns. The first two industrial strength analyzers, the SNR675 running at 270°C and the SNR674 running at 200°C, are suitable for the most demanding conditions of industrial monitoring, where high flash point solvents, resins, and plasticizers may be present. The next model, the SNR672 running at 120°C above the dew point of water vapor and most industrial solvents, is intended for application conditions that aren't as severe. These models are all available with the NEMA 4X outdoor housing for outdoor installation in any kind of climate. And for relatively clean applications such as rotogravure and flexographic printing we offer the SNR671 which is run at 60°C.



NEMA 12/13
Indoor Housing



NEMA 4X
Outdoor Housing

Find Out More
Today

Control Instruments Corporation has been engineering solutions to gas and solvent vapor monitoring problems since 1969. We work hard to assess your risks and carefully tailor a monitoring system to meet your needs. For detailed information, system specifications, and pricing, please contact us today.

PrevEx

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p: 973•575-9114 f: 973•575-0013 e: sales@controlinstruments.com w: www.controlinstruments.com

Control Instruments® Corporation

Application Note

Monitoring Flammable Gases and Vapors in Sewage Lines and Treatment Facilities

Publicly owned treatment works (POTWs) collect wastewater from municipal, commercial and industrial facilities, transport it through a series of contributor pipes, known as a collection system, and deliver it to the treatment plant.

Regulations prohibit these facilities from discharging flammable or explosive wastes from their processes into the liquid collection system. In addition to fire and explosion hazards, these wastes can affect the efficient and effective operation of the treatment facility. The only certain way to guard against these hazards is to continuously monitor for flammable gases and vapors.

The environment of the waste stream has been a challenge for most gas monitoring systems.

First, high moisture and humidity can promote corrosion, contamination and clogging that can lead to unreliable readings.

Second, poisons and corrosive materials present in the waste stream reduce sensitivity and render many combustible gas sensors inactive.

Third, most monitoring systems are calibrated to measure one specific substance and must be recalibrated when exposed to another. In wastewater applications there may be more than one solvent or unknown solvents so it is necessary to measure the concentration of all flammable gases and vapors in the waste stream atmosphere.

Continuous sampling under the harsh conditions found in waste streams demands an analyzer with distinct design features.

Because of its unique construction and operating technology, Control Instruments' PrevEx® Flammability Analyzer, is the optimum analyzer for this application.

Rugged Durable Construction

The PrevEx analyzer draws its sample from the vapor space of the waste stream. Its fully heated sample train is corrosion resistant and delivers a representative sample for measurement. The heat eliminates condensation and clogging. The analyzer further avoids condensation and maintenance problems through its simple flow system. It has no pumps, diaphragms or other moving parts that can fail. The sample probe mounts in the head space above the effluent of the sewer lines and is designed to prevent water from being pulled into the analyzer.

Other sensor types can corrode over time when exposed to the high moisture and caustic reagents in the waste sewer atmosphere.

Immune to Poisons and Corrosives

Waste streams contain compounds that will contaminate or poison some sensors. Chlorinated or sulfur-based compounds, for example, will poison catalytic sensors and render resultant readings inaccurate. Condensate and particulate can foul the optics of infrared sensors. In many cases there is no indication that the sensors have failed. The PrevEx is designed to handle these conditions. Its technology is based on a sensing flame that continuously burns the sample and any poisons or corrosives present. It is constructed of stainless steel and hard-coated aluminum components with superior corrosion resistance.

Reads Everything Accurately

The National Fire Protection Association (NFPA) establishes fire safety standards. NFPA 820, the standard for Fire Protection in Wastewater Treatment and Collection Facilities, provides guidelines for protection against fire and explosion hazards specific to wastewater treatment plants and the associated collection systems.

Copies of NFPA 820 may be obtained from the National Fire Protection Association.

Call toll free to order:
1-800-344-3555

Control Instruments® Corporation

25 Law Drive
Fairfield, NJ 07004-3295
Phone: 973-575-9114
Fax: 973-575-0013
sales@controlinstruments.com

Document	H7APP025
Created	2/25/05
Revision	0
Rev Date	-

The waste stream contains vapors from mixtures of unknown substances. The PrevEx analyzer has the ability to read multiple gases and vapors more accurately than any other sensor in the industry. This is due to its powerful universal calibration feature. This technology provides the ability to accurately measure the concentrations for many different vapors and gases, without recalibration.
Other sensor technologies react differently to different substances and do not have the ability to selectively measure just one substance in the presence of others. They do not accurately indicate the flammable hazard. For these sensor technologies recalibration is necessary when exposed to more than one substance.

Low Maintenance, Easy Calibration

When choosing a gas detection system ease of calibration and maintenance must be considered. Applicable codes and regulations require regular calibration and maintenance checks to ensure the combustible gas system is reporting accurately.
The PrevEx analyzer is simple to install, start-up and operate. It's efficient operation and all inclusive design provides the least amount of downtime including routine calibration and maintenance checks.
The simple push of a button will launch the auto-calibration process. Its built-in "service needed" relay allows you to easily satisfy your preventative maintenance program while ensuring complete safety and reliability.

Failsafe Operation

Combustible gas detectors should be approved failsafe, which alarm upon failure and loss of calibration. The PrevEx flame temperature technology is 100% reliable. Should a problem of any kind arise— a loss of fuel, air, sample flow or power— the temperature of the flame will reflect the change, alerting you immediately. By contrast, indirect sensing systems can fail yet still register as normal operation.

Control Instruments Corporation

25 Law Drive
Fairfield, NJ 07004-3295
Phone 973-575-9114
Fax 973-575-0013
sales@controlinstruments.com

APR-07-2006 14:06

LLC

FILED
APR 0 7 2006
STATE TREASURER

CERTIFICATE OF FORMATION
LIMITED LIABILITY COMPANY

1. Name of Limited Liability Company:
   126 LLC

2. Registered Agent: Business Filings Incorporated

3. Registered Office: 820 Bear Tavern Road, West Trenton, New Jersey 08628. Located in the County of Mercer.

4. The duration of the limited liability company is perpetual.

5. The name and address of the initial manager:
   David Landau, 126 Passaic Street, Newark, New Jersey 07104

The undersigned represents that this Limited Liability has one or more members, and that this filing complies with requirements detailed in NJSA 42. The undersigned hereby attests that they are authorized to sign this certificate on behalf of the Limited Liability Company.

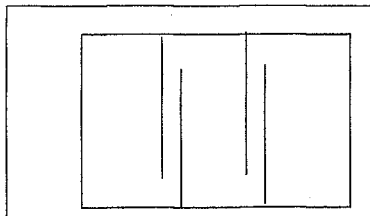
Mark Schiff

Business Filings Incorporated, Organizer
Mark Schiff, AVP

Dated: April 7, 2006

S 1683358
J 3168795

0600266356



Oil Water Separator and pH Control

Demensions
4' Wide
8' Tall
Each compartment 3'
Each Module aprox 12'
aprox 700 gallons per compartment
35 mins retention time @ 20 gpm

Holding Tank
Contaminated
Water

Manually adjusted

pH 5.5

pH adjust to 2

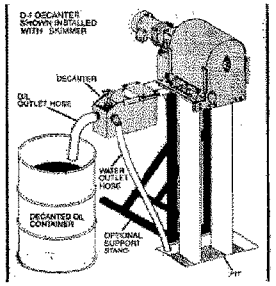
pH adjust to 2

pH adjust to 8

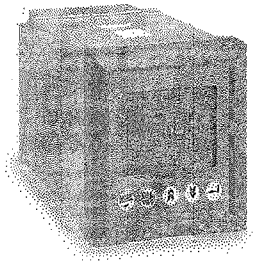
pH adjust to 9

Water
to Reuse
to Finished Holding tank
to Disposal
to Evaporation
to Sewer

Oil Water
Separator



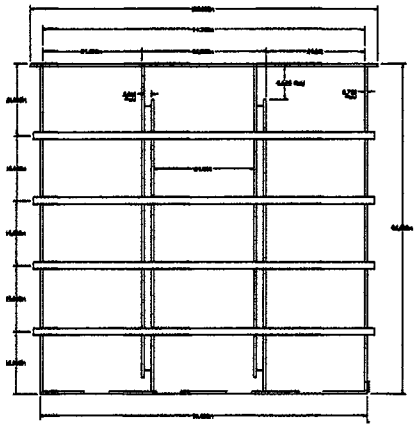
Oil Skimmer for each compartment



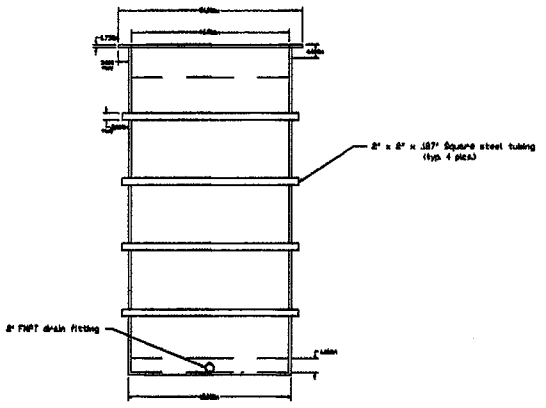
pH controller for 4 positions

Water Treatment Program for Reuse and Discharge

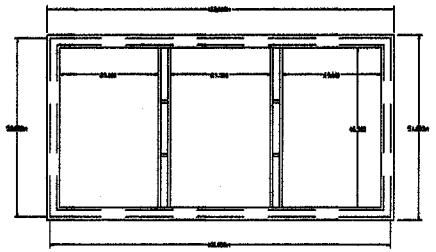
SIZE	CAGE CODE	DWG NO	REV
A4			6
SCALE Not to Scale		SHEET	



ELEVATION



SIDE



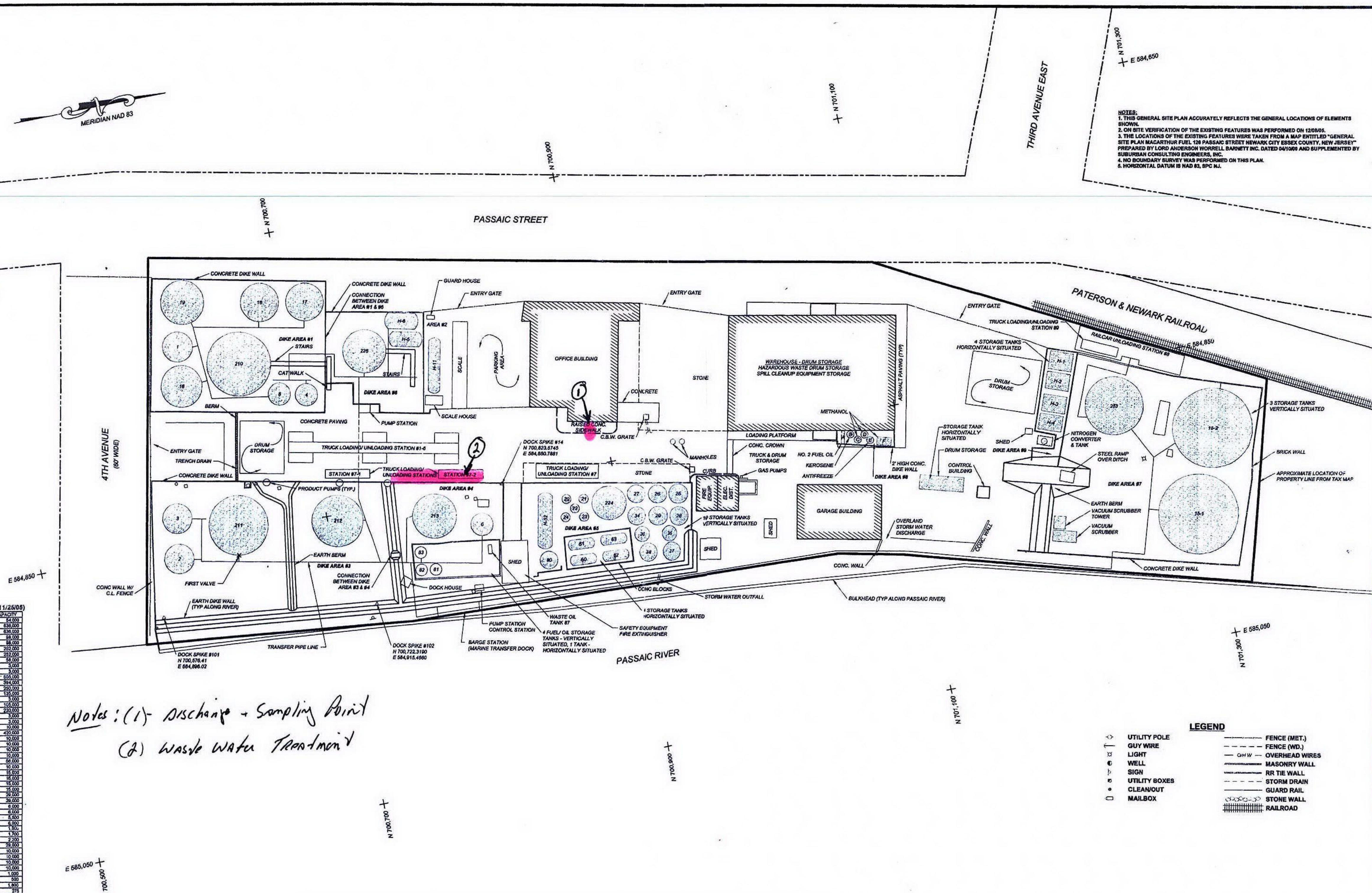
PLAN

NOTES:

1 - Material of construction: Natural copolymer polypropylene (.750" throughout).
2 - Girth Supports: 2" x 2" x .187" square steel tubing (industrial primer paint finish).

AB PLASTICS, Inc.			1287 U.S. Rt. 50 Milford, Ohio 45150	
Title: Oil/Water Separation Tank				Date: 03-25-06
Customer: Environmental Alternatives				Dwg: 06-0325
				Sheet #: 1 of 1
Checked by:	Scale: Inches			Drawn by: RPW

Revisions	Date
A:	
B:	
C:	


NOTES:
1. THIS GENERAL SITE PLAN ACCURATELY REFLECTS THE GENERAL LOCATIONS OF ELEMENTS SHOWN.
2. ON SITE VERIFICATION OF THE EXISTING FEATURES WAS PERFORMED ON 12/08/05.
3. THE LOCATIONS OF THE EXISTING FEATURES WERE TAKEN FROM A MAP ENTITLED "GENERAL SITE PLAN MACARTHUR FUEL 126 PASSAIC STREET NEWARK CITY ESSEX COUNTY, NEW JERSEY" PREPARED BY LORD ANDERSON WORRELL BARNETT INC. DATED 04/10/00 AND SUPPLEMENTED BY SUBURBAN CONSULTING ENGINEERS, INC.
4. NO BOUNDARY SURVEY WAS PERFORMED ON THIS PLAN.
5. HORIZONTAL DATUM IS NAD 83, SPC NJ.
MERIDIAN NAD 83
PASSAIC STREET
THIRD AVENUE EAST
4TH AVENUE (60' WIDE)
PATERSON & NEWARK RAILROAD
PASSAIC RIVER
OFFICE BUILDING
WAREHOUSE - DRUM STORAGE
HAZARDOUS WASTE DRUM STORAGE
SPILL CLEANUP EQUIPMENT STORAGE
GARAGE BUILDING
RAISED CONC. SIDEWALK
C.B.W. GRATE
TRUCK LOADING/ UNLOADING STATION #1-5
TRUCK LOADING/ UNLOADING STATIONS
STATION #7-2
STATION #7-1
TRUCK LOADING/ UNLOADING STATION #7
TRUCK LOADING/UNLOADING STATION #9
RAILCAR UNLOADING STATION #8
DIKE AREA #1
DIKE AREA #3
DIKE AREA #4
DIKE AREA #5
DIKE AREA #6
DIKE AREA #7
DIKE AREA #8
DIKE AREA #9
STORM WATER OUTFALL
OVERLAND STORM WATER DISCHARGE
BULKHEAD (TYP ALONG PASSAIC RIVER)
BARGE STATION (MARINE TRANSFER DOCK)
PUMP STATION CONTROL STATION
DOCK SPIKE #101 N 700,676.41 E 584,896.02
DOCK SPIKE #102 N 700,722.3190 E 584,915.4660
DOCK SPIKE #14 N 700,823.5745 E 584,850.7881
Notes: (1) - Discharge + Sampling Point
(2) Waste Water Treatment
LEGEND
UTILITY POLE
GUY WIRE
LIGHT
WELL
SIGN
UTILITY BOXES
CLEAN/OUT
MAILBOX
FENCE (MET.)
FENCE (WD.)
OVERHEAD WIRES
MASONRY WALL
RR TIE WALL
STORM DRAIN
GUARD RAIL
STONE WALL
RAILROAD
SCALE: 1" = 30'

Tank Contents and Capacity(11/25/05)

TANK	PRODUCT	CAPACITY
1	Ethylene Glycol	54,000
15-1	empty	636,000
15-2	Ethylene Glycol	636,000
16	Rec. Ethylene Glycol	98,000
17	Isopropyl Alcohol	98,000
18	MS Kensol 68	252,000
19	Acetonitrile	252,000
2	Diesel Oil	56,000
20	Fuel Oil	3,000
21	#2 Fuel Oil	3,000
210	Ethylene Glycol	605,000
211	empty	394,000
212	CUTTER STOCK(Mixed oil)	250,000
213	CUTTER STOCK(Mixed oil)	135,000
[illegible]	Cutter Stock(Mixed Oil)	3,000
224	MS Recycle	105,000
226	Ethylene Glycol	220,000
23	Fuel Oil	3,000
24	Antifreeze	3,000
25	D'Limonene	10,000
253	Ethylene Glycol	420,000
26	Antifreeze(used)	10,000
27	empty	10,000
28	# 2 oil	10,000
29	Antifreeze	10,000
3	Di Methyl Formamide	56,000
34	D'Limonene	10,000
35	Antifreeze	15,000
36	Diesel Oil	16,000
37	Antifreeze	15,000
38	D'Limonene	15,000
4	Ethylene Glycol	29,000
6	Cutter Stock(Mixed oil)	29,000
60	Cutter Stock(Mixed oil)	6,000
61	#4 oil	6,000
62	#4 oil	6,600
63	#4 oil	6,000
[illegible]	Methanol/Antifreeze	1,600
76(D)	Methanol/Antifreeze	1,700
77(B)	Methanol/Antifreeze	2,200
8	D'Limonene	29,000
80	D'Limonene	10,000
81	# 2 Fuel Oil	10,000
82	# 2 Fuel Oil	10,000
83	Citrus Terpenes	10,000
84(A)	# 2 Fuel Oil	1,000
85(E)	Methanol/Antifreeze	500
86(F)	Methanol/Antifreeze	1,800
87	Waste Oil	275
H-1	Transformer oil	23,000
H-12	Methanol	30,000
H-2	Transformer oil	23,000
H-3	Transformer oil	23,000
H-4	Transformer oil	23,000
H-5	Ethylene Glycol	23,000
H-6	Antifreeze	23,000

DESCRIPTION	NO.	DATE:	BY:	CHK:

REVISIONS

DRAWN BY: A.C. DATE: 12/19/05
CHECKED BY: J.W.P. DATE: 12/19/05
CHECKED BY: DATE: 12/19/05

BRADFORD R. ELAM, P.L.S.
NEW JERSEY PROFESSIONAL
LAND SURVEYOR LIC. NO. 24GS03758300
12/19/05
DATE:

SUBURBAN CONSULTING ENGINEERS, INC.
- Civil Engineers - Municipal Engineers -
- Planners - Environmentalists - Land Surveyors -
100 Valley Rd., Suite 202, Mt. Arlington, N.J. 07856 973.398.1776
35 Leigh St. P.O. Box 4921, Clinton, N.J. 08809-4921 908.238.0306

W.A.S. TERMI[illegible]
126 PASSAIC S[illegible]
NEWARK, ESSEX COUNTY, NJ

GENERAL SITE PLAN

PROJECT NUMBER: 3397.2
SCALE: 1" = 30'
SHEET 1 OF 1
REVISION -

E:\SCE\Newark\3397.2 Newark\3397-2 General Site Plan.dwg Mon, Dec 19, 2005 - 11:07am acastellanos Suburban Consulting Engineers, Inc.